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10/624,165	07/21/2003	Tiet Pham	100.554US01	6359
34206	7590	10/30/2007	EXAMINER	
FOGG & POWERS LLC			TO, JENNIFER N	
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SUITE 1000				
MINNEAPOLIS, MN 55402				
			ART UNIT	PAPER NUMBER
			2195	
			NOTIFICATION DATE	DELIVERY MODE
			10/30/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@fogglaw.com

Office Action Summary

Application No.

10/624,165

Applicant(s)

PHAM, TIET

Examiner

Jennifer N. To

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-23 are pending for examination.
2. Claim 5 is objected to because of the following informalities: typographical error (i.e. claim 5 depend to claim 4 not claim 5). Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Vargas et al. (hereafter Vargas) (U.S. Patent No. 6918115).
5. As per claim 1, Vargas teaches the invention as claim including a method of scheduling a plurality of periodic events, wherein each periodic event has an associated periodic interval of time and an associated set of services (col. 8, line 55 through col. 8, line 58), the method comprising:

determining when one of the plurality of periodic events occurs (col. 8, line 59 through col. 9, line 4); and

distributing the execution of the services associated with that periodic event throughout a next periodic interval of time associated with that periodic event following the occurrence of that periodic event (col. 9, lines 5-10).

6. As per claim 2, Vargas teaches that wherein one of the periodic events occurs when a periodic interval of time associated with that periodic event elapses (col. 8, lines 66-65).

7. As per claim 3, Vargas teaches that wherein distributing the execution of the services includes executing successive services on successive clock ticks following a clock tick on which that periodic event occurred (col. 8, line 59 through col. 9, line 45).

8. As per claim 4, Vargas teaches that wherein the execution of each service of the services is either enabled or disabled (col. 9, line 46 through col. 10, line 55).

9. As per claim 5, Vargas teaches that wherein the execution of each service of the services is enable or disabled in order to implement one of a one-shot mode, a burst mode, and a continuous mode of service execution (col. 9, line 46 through col. 10, line 55).

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10. As per claim 6, Vargas further teaches determining, for each of the set of services associated with that periodic event, if that service is enabled for execution (col. 9, line 46 through col. 10, line 55).

11. As per claim 7, Vargas teaches that wherein distributing the execution of the services associated with that periodic event during the next periodic interval of time includes distributing the execution of the enabled services associated with that periodic event during the next periodic interval of time associated with that periodic event following the occurrence of that periodic event (col. 9, line 46 through col. 10, line 55).

12. As per claim 8, Vargas teaches that wherein distributing the execution of the enabled services includes executing successive enabled services on successive clock ticks following the clock tick on which that periodic event occurred (col. 8, line 59 through col. 9, line 45).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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14. Claims 9-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vargas et al. (hereafter Vargas) (U.S. Patent No. 6918115), and in view of Applicant Admitted As Prior Art (here after AAPA) (specification, pages 1-2).

15. As per claim 9, Vargas teaches the invention substantially as claim including a system comprising:

a periodic event scheduler (fig. 6, item 604) that schedules a plurality of periodic events, wherein each periodic event has an associated periodic interval of time and an associated set of services (col. 8, line 55 through col. 8, line 58);

wherein the periodic event scheduler (fig. 6, item 604):

determines when one of the plurality of periodic events occurs (col. 8, line 59 through col. 9, line 4); and

distributes the execution of the services associated with that periodic event during a next periodic interval of time associated with that periodic event following the occurrence of that periodic event (col. 9, lines 5-10).

16. Vargas did not specifically teach a tick generator that generates interrupts in response to clock ticks, and an interrupt handler that receives the interrupts from the tick generator and executes the periodic event scheduler in response to the interrupt.

17. However, AAPA teaches a tick generator that generates interrupts in response to clock ticks (specification, paragraph [0002]); and an interrupt handler that receives the

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interrupts from the tick generator and executes the periodic event scheduler in response to the interrupt (specification, paragraph [0003]).

18. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Vargas and AAPA because AAPA 's system teaches a tick generator that generates interrupts in response to clock ticks (specification, paragraph [0002]), and an interrupt handler that receives the interrupts from the tick generator and executes the periodic event scheduler in response to the interrupt (specification, paragraph [0003]) would improve the integrity of Vargas system by utilizing the interrupt handler to invoke or execute the periodic event scheduler.

19. As per claim 10, Vargas teaches that wherein one of the periodic events occurs when a periodic interval of time associated with that periodic event elapses (col. 8, lines 66-65).

20. As per claim 11, Vargas teaches that wherein distributing the execution of the services includes executing successive services on successive clock ticks following a clock tick on which that periodic event occurred (col. 8, line 59 through col. 9, line 45).

21. As per claim 12, Vargas teaches that wherein the execution of each service of the services is either enabled or disabled (col. 9, line 46 through col. 10, line 55).

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22. As per claim 13, Vargas teaches that wherein the execution of each service of the services is enable or disabled in order to implement one of a one-shot mode, a burst mode, and a continuous mode of service execution (col. 9, line 46 through col. 10, line 55).

23. As per claim 14, As per claim 6, Vargas further teaches determining, for each of the set of services associated with that periodic event, if that service is enabled for execution (col. 9, line 46 through col. 10, line 55).

24. As per claim 15, Vargas teaches that wherein distributing the execution of the services associated with that periodic event during the next periodic interval of time includes distributing the execution of the enabled services associated with that periodic event during the next periodic interval of time associated with that periodic event following the occurrence of that periodic event (col. 9, line 46 through col. 10, line 55).

25. As per claim 16, Vargas teaches that wherein distributing the execution of the enabled services includes executing successive enabled services on successive clock ticks following the clock tick on which that periodic event occurred (col. 8, line 59 through col. 9, line 45).

26. As per claims 17-23, they are rejected for the same reason as claims 9-16 above.

Response to Arguments

27. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

28. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer N. To whose telephone number is (571) 272-7212. The examiner can normally be reached on M-T 6AM- 3:30 PM, F 6AM- 2:30 PM.

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30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

31. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jennifer N. To
Examiner
Art Unit 2195

 **MENG-AI T. AN**
SUPERVISORY PATENT EXAMINER
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